

APPENDIX A



US006278862B1

(12) **United States Patent**
Henderson

(10) Patent No.: **US 6,278,862 B1**
(45) Date of Patent: ***Aug. 21, 2001**

(54) **METHOD AND APPARATUS FOR
ENHANCING THE EFFICIENT
COMMUNICATION OF INFORMATION IN
AN ALPHANUMERIC PAGING NETWORK**

(76) Inventor: **Daniel A. Henderson, 33300 Mission
Blvd., Union City, CA (US) 94587**

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

(21) Appl. No.: **08/177,851**

(22) Filed: **Jan. 5, 1994**

(51) Int. Cl.⁷ **H03Q 7/00; G08B 5/22**

(52) U.S. Cl. **455/31.1; 340/825.27;
340/825.44**

(58) Field of Search **379/56, 63, 355,
379/62; 340/825.44, 825.27; 455/355, 31.1**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,065,642 12/1977 McClure 179/18 B
4,072,824 2/1978 Phillips 179/18 B

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

3315625 10/1984 (DE) 379/58
3329267 2/1985 (DE) 379/58
3421886 12/1985 (DE) H04M/1/00
0 212 761 8/1986 (EP) H04Q/7/04

(List continued on next page.)

OTHER PUBLICATIONS

Messaging: A New Direction—Awash in E-Mail troubles?
A Rafi Of New Products Is Coming To The Rescue,
Network Computing, Oct. 1, 1996, pp p. 58.

Identafone overview from website dated Oct. 17, 1996.
NetPAGE product overview.

(List continued on next page.)

Primary Examiner—Edward L. Coles, Sr.

Assistant Examiner—Pan Lee

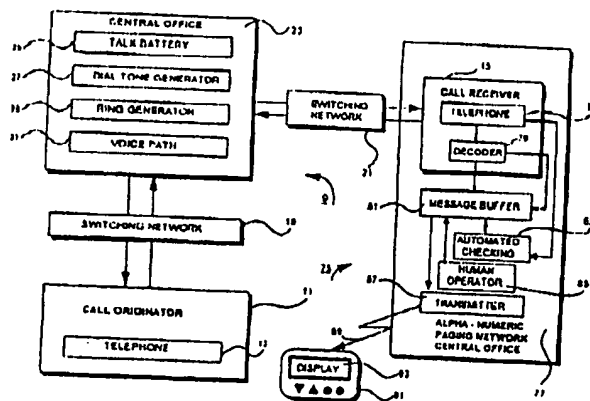
(74) Attorney, Agent, or Firm—Melvin A. Hunn

(57)

ABSTRACT

A method and apparatus is described for enhancing the communication of data in an alphanumeric paging network. In accordance with the present invention, caller-identification information is automatically transmitted through a telephone network to a central office of a alphanumeric paging network when a page-originating communicant engages the network. The caller-identification information preferably includes numeric data which identifies the telephone number of the particular telephone unit utilized by the page-originating communicant to engage the alphanumeric paging network, and alphanumeric text which identifies the entity associated in the telephone directory with that particular telephone number. This information may be utilized in an automated fashion to reduce the required interaction between the alphanumeric paging network and the page-originating communicant. In particular it is helpful in minimizing the amount of human interaction required. The page-originating communicant may be challenged or queried to determine the veracity and accuracy of the information transmitted in the caller-identification signal, preferably in an automated fashion utilizing a synthesized voice presentation of questions coupled with responses provided by the page-originating communicant with the key pad of the particular telephone being utilized by him or her. The page-originating communicant may then be optionally engaged by a human or automated operator which then receives an optional message for transmission to the page-receiving communicant along with the caller-identification information. Upon receipt, the portable communication device carried by the page-receiving communicant decodes the information and utilizes it in a manner to determine what is displayed on the display of the portable communication device.

6 Claims, 23 Drawing Sheets





SPECIFICATION

- 0025 DIV
3052/1161
08/726024.

Originally filed
parent app w/ pre
amend

Docket No. 0317MH-23513

CERTIFICATE OF EXPRESS MAIL	
EXPRESS MAIL NO. <u>PM 385697526 US</u>	
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" under 37 CFR § 1.10 on the date indicated below and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.	
<u>10/4/96</u>	<u>Meleathur</u>
Date of Deposit	Signature
<u>Oct 4, 1996</u>	

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that I, **DANIEL A. HENDERSON**, have invented new and useful improvements in a

METHOD AND APPARATUS FOR IMPROVED PAGING RECEIVER AND
SYSTEM

of which the following is a specification:



08/726024

BACKGROUND OF THE INVENTION

1. Field of the Invention:

This invention relates in general to communications systems and in particular to communications systems which include paging devices.

2. Description of the Prior Art:

Numerous companies are attempting to improve the manner in which people communication over wireless systems. The present invention addresses many deficiencies in the prior art systems.

1 **CROSS-REFERENCE TO RELATED APPLICATIONS**
2

3 This Application claims the benefit of the filing date under 35 USC §§119 and/or
4 120, and 37 CFR §§1.60 and 1.78 to the following U.S. and U.S. provisional patent
5 applications, and is a continuation-in-part of the U.S. patent application:

6 1. U.S. provisional patent application serial no. 60/005,029, filed on October
7 6, 1995, entitled "Method and Apparatus for Improved Paging Receiver and System";
8 and

9 2. U.S. patent application serial no. 08/177,851, filed on January 5, 1994,
10 entitled "Method and Apparatus for Enhancing the Efficient Communication of
11 Information in an Alphanumeric Paging Network".
12
13